

## REMARKS

By this Reply and Amendment, claims 1, 9, 10, 17, 22 and 31 have been amended, claims 12, 13, 14, 15, 16 and 30 have been canceled without prejudice and claims 1-11, 17-29 and 31-34 remain pending in the present application. Applicant respectfully requests allowance of all pending claims.

Claims 10-16, 22-23 and 30-31 were objected to as reciting an "internal pump" instead of a "gear pump." Accordingly, the subject claims have been amended to recite "gear pump." Also, the recitation of "lubricant pump" in claims 16 and 22 has been amended, and the claims now recite "gear pump." Accordingly, the claim objections are believed to be overcome.

Claims 13, 15-17 and 30 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. Claims 13, 15-17 and 30 have been canceled without prejudice and, accordingly, the rejection under 35 U.S.C. § 112, first paragraph, is believed to be moot.

Claims 9-17 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In the Official Action, it was stated that claim 9 recited a "desired location" and that it was not clear as to what constituted a desired location. Applicant disagrees with this assertion on the part of the Examiner, but independent claim 9 has been amended to change the subject recitation. Accordingly, the rejection under 35 U.S.C. § 112, second paragraph, is believed to be overcome.

Claims 1 and 7-8 were rejected under 35 U.S.C. § 102 (b) as anticipated by the Carter reference, U.S. Patent No. 3,975,117. Independent claim 1 has been amended to clarify the claim language, and claims 1 and 7-8 are believed patentably distinct over the Carter reference.

The Carter reference discloses a motor driven, inducer-equipped, centrifugal pump having pumps located outside of its motor housing 17. In fact, the motor 30 and the pumps 37, 56 and 79 are not within the same housing. Accordingly, the Carter reference does not disclose the subject matter presently recited in claims 1, 7 and 8. For example, the Carter reference does not disclose a rotor and a stator disposed within a motor housing combined with a shaft at least partially disposed within the motor housing and an "internal lubricant pump disposed within the motor housing and circumferentially about the shaft" as recited in amended independent claim 1 as well as dependent claims 7 and 8. Accordingly, claims 1, 7 and 8 are believed patentably distinguishable over the Carter reference.

Claims 1-5 were rejected under 35 U.S.C. § 102 (e) as anticipated by the Gilbert reference, U.S. Patent No. 6,422,346. This rejection is respectfully traversed.

First, the Gilbert reference, to the extent it can be understood, does not disclose various aspects of the subject claims. Additionally, it is respectfully submitted the Examiner has attributed subject matter to the Gilbert reference that it does not actually possess.

The Gilbert reference is directed to a gas compressor having a crankcase rotatably supporting a drive shaft. The drive shaft 12 is connected to a compression generating structure, such as a conventional cylinder-piston combination of a compressor. The shaft also is connected to a motor means 16. Oil passage means 18 is formed in the shaft to convey lubricating oil to various portions of the compressor. (Column 3, lines 5-15). The Gilbert reference does not disclose a rotatable shaft at least partially disposed within a motor housing and "an internal lubricant pump disposed within the motor housing and circumferentially about the shaft" as recited in amended independent claim 1 and dependent claims 2-5. The shaft discussed in the Gilbert reference is the pump shaft rather than the motor shaft. (See also column 4, lines 5-9).

Furthermore, the Examiner cites Gilbert as disclosing various elements of the subject claims, such as an internal lubricant pump “generally indicated as 54. . .” However, element 54 in the Gilbert reference is described as a “bearing means or cage 54” and is not the internal lubricant pump as stated by the Examiner. (See column 4, line 1). Accordingly, claims 1-5 are believed patentable over the Gilbert reference.

Claim 6 was rejected under 35 U.S.C. § 103 (a) as unpatentable over the Gilbert reference in view of the Klumpp et al. reference, U.S. Patent No. 5,211,544. This rejection is respectfully traversed. Claim 6 depends from independent claim 1 and is patentable for the reasons provided above with respect to claim 1. The disclosure of the Klumpp et al. reference does not obviate the deficiencies of the subject matter disclosed in the Gilbert reference.

Claims 9-12 and 18-34 were rejected under 35 U.S.C. § 103(a) as unpatentable over the Parmeter et al. reference, U.S. Patent No. 5,828,149 in view of the Klumpp et al. reference. This rejection is respectfully traversed.

First, the combination of the Parmeter et al. reference and the Klumpp et al. reference does not disclose each and every element of the subject claims and, secondly, the combination of references is improper. With respect to disclosure of elements, the Parmeter et al. and Klumpp et al. references, taken alone or in combination, do not disclose, teach or suggest a submersible motor having a gear pump that comprises “first and second gears adapted to pressurize the lubricant” as recited in claim 9 and its dependent claims. Similarly, the references, taken alone or in combination, do not disclose, teach or suggest an outer housing with a stator disposed within the outer housing and a “gear pump internal to the outer housing and external to the shaft” to pressurize lubricant, as recited in independent claim 18 and its dependent claims. Again, the references, taken alone or in combination, do not disclose, teach or suggest a method for increasing the life expectancy of a subterranean completion that comprises directing lubricant to areas of a submersible motor and pressurizing the flow of lubricant “with a gear pump” as recited in independent claim 24 and its dependent claims. Similarly, the

references, taken alone or in combination, do not disclose, teach or suggest a pump “disposed within the outer housing and external to the drive shaft” to pressurize lubricant within the system, as recited in independent claim 32 and its dependent claims.

The Parmeter et al. reference discloses an axial rod 59 with a helical flight 61 rigidly attached to the rod 59. The unit is secured within a shaft bore 53. (Column 3, lines 6-15). Accordingly, the pump is not external to the shaft. Furthermore, the Klumpp et al. reference merely states that “circulation impellers for a hydraulic pump can be “elements of a gear pump, trochoidal pump, sickle pump, Eaton pump, screw pump or vane pump.” The reference, however, makes no further description or illustration as to how circulation impellers can be elements of a gear pump or the other pumps listed. Accordingly, the disclosure is insufficient to disclose, teach or suggest elements of the subject claims.

Secondly, even if the disclosure of the two references were supplemented to disclose each and every element of the subject claims, the combination of references is improper. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d

1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). In the present case, there is no motivation to combine the references and, in fact, there is a teaching away from the combination.

In the Official Action, the Examiner states that the Parmeter et al. reference employs “an impeller pump rather than a gear pump in order to pump the lubricant.” The Examiner further states that the Klumpp et al. reference teaches that “the two pumps were art recognized equivalents. . . .” However, these are not the teachings of the two references.

In the Parmeter et al. reference, prior art pumps were discussed as having “an impeller that rotated within a diffuser.” (Column 1, lines 38-39). In contrast, the Parmeter et al. invention is described as an inducer pump for circulating lubricant that comprises “a rod with a helical flight mounted to the rod.” (Column 1, lines 54-56). The helical flight is described as extending substantially to the side wall of the shaft bore and defining a helical fluid path between the side wall of the axial bore and the rod. (Column 1, lines 56-58). In other words, the impeller style pumps of the prior art had been replaced by the rod and helical flight disposed internally within a shaft bore. Accordingly, the Parmeter et al. reference does not teach the use of an impeller pump, and thus any comparison of impeller pumps to gear pumps in the Klumpp et al. reference provides no motivation to combine the Klumpp et al. reference and the Parmeter et al. reference. In fact, the Parmeter et al. reference actually teaches away from such combination by describing the use of a helical pump instead of an impeller pump.

Furthermore, the Klumpp et al. reference is not a proper reference to rely on for the teaching of a gear pump as recited in the present application, because there is no description or illustration of any type of gear pump. Additionally, the obscure description in the Klumpp et al. reference of “circulation impellers that can be used for the invention can be of any sort, for example, elements of a gear pump, . . .” does not show or teach the interchangeability of a gear pump in the present application. The drafter of the Klumpp et al. reference states that elements of a gear pump may be used

without any further description as to which elements and as to how they would be substituted for an impeller.

Accordingly, the Parmeter et al. and Klumpp et al. references do not disclose the elements of the subject claims, and even if the disclosure could be supplemented to disclose such elements, the combination of the Parmeter et al. and Klumpp et al. references is improper. Accordingly, currently pending claims 9-11, 18-29 and 31-34 are patentably distinguishable over the cited references.

Applicant believes that all pending claims are now in condition for allowance. However, if further amendments are deemed needed to improve the form of the claims, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

Respectfully submitted,



Robert A. Van Someren  
Reg. No. 36,038  
FLETCHER, YODER & VAN SOMEREN  
P.O. Box 692289  
Houston, TX 77269-2289  
(281) 970-4545

Date: March 10, 2003



RECEIVED

MAR 20 2003

VERSION WITH MARKINGS TO SHOW CHANGES MADE  
IN THE CLAIMS

TECHNOLOGY CENTER R3700

Please amend claims 1, 9, 10, 17, 22 and 31 as follows:

RECEIVED

MAR 20 2003

TECHNOLOGY CENTER R3700

1. (Twice Amended) A motor, comprising:

a rotor and a stator disposed within a motor housing;  
a rotatable shaft at least partially disposed within the motor housing;  
a plurality of wear surfaces that support the rotatable shaft;  
an internal lubricant pump disposed within the motor housing and  
circumferentially about the shaft, and  
a conduit for conducting the lubricant from the lubricant pump to the plurality  
of wear surfaces.

9. (Twice Amended) A submersible pumping system, comprising:

a submersible pump;  
a motor protector; and  
a submersible motor having a gear pump to supply a pressurized lubricant to a  
desired location bearing within the submersible motor, wherein the gear pump comprises  
first and second gears adapted to pressurize the lubricant.

10. (Amended) The submersible pumping system as recited in claim 9, further  
comprising a conduit extending from the internal gear pump to the desired location.

17. (Amended) The submersible pumping system as recited in claim 16 9,  
wherein the pressurized lubricant comprises an a dielectric oil.

22. (Amended) The submersible motor as recited in claim 21, wherein the  
lubricant gear pump comprises: a pump body having an eccentric oil cavity, and a pump rotor  
disposed in the eccentric oil cavity.

31. (Amended) The method as recited in claim 28, further comprising locating the internal gear pump above a rotor of the submersible motor.

Please cancel claims 12, 13, 14, 15, 16 and 30 without prejudice.